

**Meeting Date**

November 12, 2023

**Night Begins**

6:53 PM. EST

*Note: Astronomical Twilight Ends***Solar Noon / Midnight**

12:19 EST

*Note: on Meeting Date***Moon Quarters**

Last 11/05, New 11/13, First 11/20, Full 11/27

**Darkest Evenings**

11/03 – 11/18

*Note: 2 days before Last Quarter thru 2 days before First Quarter***Viewing Resources**

Evening Sky Maps

<http://skymaps.com/>

Astronomy Forecast

<https://clearoutside.com/forecast/42.82/-83.14>

RASC Finest NGC Objects

<https://www.rasc.ca/finest-ngc-objects>

A. Clarke's Discovering Astronomy

<https://discovering-astronomy.eu/index.html>**RASC Finest NGC****Focus: 01 Hours RA Thru 02 Hours RA***Note: West to East***Featured Objects**

Primary ID	RASC Number	Alternate ID	Con	Type	RA 2000	Decl 2000	Mag	Size
NGC 663	9	Collinder 20	Cas	OC	01h46m09.0s	+61°14'06"	7.1	14.0'
		80+ stars; look for NGC's 654 and 659 nearby						
NGC 457	8	Owl/ET Cluster	Cas	OC	01h19m35.0s	+58°17'12"	6.4	20.0'
		80+ stars; rich; one of the best Cas clusters						
NGC 869 / 884	17	Double Cluster	Per	OC	02h22m18.0s	+57°08'12"	5.3	18.0'
		!! Double Cluster; 315+ stars; use low power.						
NGC 891	12	Silver Sliver	And	Gal	02h22m33.6s	+42°20'46"	9.8	11.7'x 2.3'
		!! faint, classic edge-on with dust lane						
NGC 1023	18	Arp 135	Per	Gal	02h40m24.0s	+39°03'48"	8.6	7.6'x 2.8'
		Bright lens-shaped galaxy near M34						
NGC 772	14	Arp 78	Ari	Gal	01h59m20.0s	+19°00'28"	9.8	5.9'x 3.2'
		Diffuse spiral galaxy						
NGC 936	16	MCG 0-7-17	Cet	Gal	02h27m37.5s	-01°09'20"	10.2	4.5'x 3.4'
		Near M77; NGC 941 in the same field						

**Urban & Small Scope Bonus****Focus: 01 Hours RA Thru 02 Hours RA***Note: West to East*A selection of double stars from Agnes Clarke's excellent book, *Discovering Double Stars (for Northern light-polluted skies)***Featured Double Stars**

Primary ID	Magnitude	Separation	PA	Description
Eta Per, page 70	3.8   8.5	28"	300	Bright orange primary, fainter blue secondary.
Almach (And), Page 71	2.3   5.5	9.8"	63	Spectacular orange primary, blue secondary.
Iota (6) Tri, page 73	5.3   6.9	3.9"	71	A tight pair of matched yellow and blue stars.
STF 239, page 73	7.0   8.0	13.8"	211	A comfortably separated yellow-blue pairing.
33 Ari, page 81	5.5   8.4	28.6"	0	A bright yellow primary, faint blue companion.
1 Ari, page 83	6.2   7.2	2.8"	166	A close pair, yellow primary, blue secondary.
Gamma Ari, page 83	4.8   4.8	7.8"	0	An equal pair of icy blue stars, close separation.
Alrisha (Psc), page 89	4.1   5.2	1.8"	260	An extremely tight pair of bright, white stars.
66 Cet, page 92	5.7   7.5	16.5"	234	A comfortably separated yellow and blue pair.